

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Previously Presented) A method for managing a data imaging service from a
2 management terminal in a distributed computer system having a host computer
3 system with at least one storage device connected to the computer system by
4 driver software, the method comprising:
5 (a) inserting an interface layer between the driver software and the storage
6 device, the interface layer exporting a platform dependent API comprising
7 a plurality of API methods that can be used to control data passing
8 between the driver software and the storage device;
9 (b) running, in the host computer system, management facade software that
10 receives calls to platform-independent methods and generates at least
11 one API method call to the interface layer in order to execute the platform-
12 independent method calls;
13 (c) running, in the host computer system, a federated bean that generates
14 platform-independent method calls to the management facade to control
15 the interface layer via the plurality of API methods; and
16 (d) controlling the federated bean to designate master volumes, shadow
17 volumes and bitmap volumes and to transfer data between specified
18 master and shadow volumes.
- 1 2. (Original) The method of claim 1 wherein step (d) comprises controlling the
2 federated bean with a command line interface.
- 1 3. (Original) The method of claim 1 wherein step (d) comprises controlling the
2 federated bean with a graphical user interface.

- 1 4. (Original) The method of claim 1 wherein step (d) comprises:
2 (d1) creating a volume set; and
3 (d2) designating a master volume, a shadow volume and a bitmap volume as
4 part of the volume set; and
5 (d3) performing data imaging operations on the volume set.
- 1 5. (Original) The method of claim 4 wherein a plurality of volume sets are created
2 and wherein the method further comprises:
3 (e) creating a set group; and
4 (f) adding selected volume sets to the set group; and
5 (g) controlling the set group with a single command to perform data imaging
6 operations on each set in the set group.
- 1 6. (Original) The method of claim 4 further comprising attaching an overflow volume
2 to the volume set.
- 1 7. (Original) The method of claim 4 wherein the computer system has a first host
2 with a volume set thereon and a second host and the method comprises
3 exporting a shadow volume in the volume set from the first host.
- 1 8. (Original) The method of claim 7 further comprising importing the shadow volume
2 exported by the first host into the second host.
- 1 9. (Previously Presented) Apparatus for managing a data imaging service from a
2 management terminal in a distributed computer system having a host computer
3 system with at least one storage device connected to the computer system by
4 driver software, the apparatus comprising:

5 an interface layer located between the driver software and the storage
6 device, the interface layer exporting a platform dependent API comprising a
7 plurality of API methods that can be used to control data passing between the
8 driver software and the storage device;

9 management facade software that runs in the host computer system and
10 receives calls to platform-independent methods and generates at least one API
11 method call to the interface layer in order to execute the platform-independent
12 method calls;

13 a federated bean that runs in the host computer system and generates
14 platform-independent method calls to the management facade to control the
15 interface layer via the plurality of API methods; and

16 a presentation program that controls the federated bean to designate
17 master volumes, shadow volumes and bitmap volumes and to transfer data
18 between specified master and shadow volumes.

1 10. (Original) The apparatus of claim 9 wherein the presentation program comprises
2 a command line interface.

1 11. (Original) The apparatus of claim 9 wherein the presentation program comprises
2 a graphical user interface.

1 12. (Original) The apparatus of claim 9 wherein the presentation program comprises:
2 program methods for creating a volume set; and
3 a screen display for designating a master volume, a shadow volume and a
4 bitmap volume as part of the volume set; and
5 program methods for performing data imaging operations on the volume
6 set.

1 13. (Original) The apparatus of claim 12 wherein a plurality of volume sets are
2 created and wherein the apparatus further comprises:
3 program methods for creating a set group; and
4 a screen display for adding selected volume sets to the set group; and
5 program methods for controlling the set group with a single command to
6 perform data imaging operations on each set in the set group.

1 14. (Original) The apparatus of claim 12 further comprising program methods for
2 attaching an overflow volume to the volume set.

1 15. (Original) The apparatus of claim 12 wherein the computer system has a first
2 host with a volume set thereon and a second host and the apparatus comprises
3 means for exporting a shadow volume in the volume set from the first host.

1 16. (Original) The apparatus of claim 15 further comprising means for importing the
2 shadow volume exported by the first host into the second host.

1 17. (Previously Presented) A computer program product for managing a data
2 imaging service from a management terminal in a distributed computer system
3 having a host computer system with at least one storage device connected to the
4 computer system by driver software, the computer program product comprising a
5 computer usable medium having computer readable program code thereon,
6 including:

7 interface layer program code located between the driver software and the
8 storage device, the interface layer code exporting a platform dependent API
9 comprising a plurality of API methods that can be called to control data passing
10 between the driver software and the storage device;

11 management facade software that runs in the host computer system and
12 receives calls to platform-independent methods and generates at least one API

13 method call to the interface layer in order to execute the platform-independent
14 method calls;

15 a federated bean that runs in the host computer system and generates
16 platform-independent method calls to the management facade to control the
17 interface layer via the plurality of API methods; and

18 a presentation program that controls the federated bean to designate
19 master volumes, shadow volumes and bitmap volumes and to transfer data
20 between specified master and shadow volumes.

1 18. (Original) The computer program product of claim 17 wherein the presentation
2 program comprises a command line interface.

1 19. (Original) The computer program product of claim 17 wherein the presentation
2 program comprises a graphical user interface.

1 20. (Previously Presented) A computer data signal embodied in a carrier wave for
2 managing a data imaging service from a management terminal in a distributed
3 computer system having a host computer system with at least one storage
4 device connected to the computer system by driver software, the computer data
5 signal comprising:

6 interface layer program code located between the driver software and the
7 storage device, the interface layer code exporting a platform dependent API
8 comprising a plurality of API methods that can be called to control data passing
9 between the driver software and the storage device;

10 management facade software that runs in the host computer system and
11 receives calls to platform-independent methods and generates at least one API
12 method call to the interface layer in order to execute the platform-independent
13 method calls;

14 a federated bean that runs in the host computer system and generates
15 platform-independent method calls to the management facade to control the
16 interface layer via the plurality of API methods; and
17 a presentation program that controls the federated bean to designate
18 master volumes, shadow volumes and bitmap volumes and to transfer data
19 between specified master and shadow volumes.